

## ABSTRACT

A device for electrohydrodynamically (EHD) mixing fluids includes a mixing channel, the mixing channel having at least one supply channel fluidically connected thereto for transport of fluid into the mixing channel. At least two electrodes are provided, at least one of the electrodes for charging at least a portion of the fluid in the mixing channel. The electrodes impose an electric field in the mixing channel to induce EHD mixing of the fluid in the mixing channel. A method for EHD mixing of fluids applies an electric field to a mixing channel to induce EHD mixing.